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Jan S. Stell

PROCEDURE INSTRUCTION LETTER NO. 108-V-02

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SUBJECT: Technical Support Assistance in Reviewing Roof Control Plans

#### Scope

This Procedural Instructional Letter (PIL) applies to Coal Mine Safety and Health District Managers, coal mine enforcement personnel and Technical Support (TS) personnel.

#### **Purpose**

The purpose of this PIL is to provide guidance for district personnel on when to send roof control plans and amendments to TS for further review. Roof control plans and amendments meeting certain criteria should be forwarded to TS for additional analysis.

#### **Procedure Instruction**

Roof control plans or amendments for coal mines that meet any of the following criteria should be forwarded to TS:

- Bounce- and bump-prone mines;
- Utilize room and pillar retreat mining at overburden depths of 1000 feet and greater;
- Do not meet or exceed the ARMPS design criteria listed in Program Information Bulletin (PIB) P08-08, or that do not meet or exceed minimum safety criteria for other computer models used; and
- Any other criteria at the discretion of the District Manager, including plans that are complex, non-typical, or present unique or novel situations (e.g. special overmining or undermining situations).

Along with the roof control plan or amendment the following information (if available) should be forwarded to TS:

- Mine map (preferably in AutoCAD format) that depicts;
  - o Current mine workings;
  - o Mining projections for the next 12 months;
  - o Reportable roof falls, coal or rock outbursts;
  - o Overburden contours at 100 foot intervals;
  - o Overmining and undermining (with interburden distance noted);
  - Mine workings in the same seam in adjacent mines;
- Pillar stability analyses such as ARMPS, LAMODEL (including input and plot files) or other numerical modeling conducted by District personnel, the operator or consultant;
- Core hole location and logs;
- Other information upon request by TS; and
- Contact information for the District and the mine operator.

## **Background**

Recent evaluations of the Roof Control Plan Approval Process have resulted in recommendations to improve the sometimes complex review of roof control plans. One of these recommendations addressed the need to establish guidelines for District personnel concerning the requesting of assistance from TS during the roof control plan review process. The implementation of such guidelines helps to ensure TS involvement in those situations deemed necessary due to the complexity or perceived risk of the proposed roof control plan or amendment. The criteria listed in the PIL were chosen for two reasons. First, ground control hazards associated with room and pillar retreat mining tend to intensify with depth. At overburden depths of 1000 feet and greater, extra precautions such as the use of substantial barrier pillars are needed. Secondly, it is anticipated that operators will increasingly be submitting consultant's reports, computer modeling and other analyses, in-lieu-of or in addition to an ARMPS evaluation to MSHA, to be used as justification for plan approval.

## **Authority**

The Federal Mine Safety and Health Act of 1977

## **Filing Instructions**

This PIL should be filed behind the tab marked "Procedure Instruction Letters" in the Coal Mine Safety and Heath General Inspection Procedures Handbook.

### **Issuing Office and Contact Persons**

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